

10/565,450

1-38. (CANCELED)

39. (PREVIOUSLY PRESENTED) A clutch arrangement in an automatic transmission comprising two axially adjacent multi-disc clutches (B, E) to each of which is assigned a piston-cylinder arrangement for axial clutch actuation, a pressure space for axial actuation, a pressure compensation space for a dynamic clutch actuation pressure compensation and means for lubricant or coolant supply, the two clutches(B, E) are disposed radially one above another, piston-cylinder arrangements for actuation of the two clutches (B, E) are at least to a great extent axially disposed side by side, a pressure compensation space (25) for a radially outer clutch (B) is located axially next to a pressure space (8) for actuation of a piston (17) of a radially inner clutch (E) and a lubricant or coolant (30) for the radially outer clutch (B) can be directly tapped from the pressure compensation space (25) for actuation of the outer clutch (B).

40. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein between the pressure space (8) for actuation of the piston (17) of the radially inner clutch (E) and the pressure compensation space (25) for a piston (10) of the radially outer clutch (B), a common disc carrier (9) of the radially inner and of the radially outer clutch (B, E) is situated on which both inner discs (22) of the outer clutch (B) and also outer discs (24) of the inner clutch (E) are jointly non-rotatably and axially movably fastened.

41. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 40, wherein the common disc carrier (9) is connected on a radially inner section with a hub (3) of the disc carrier (9) situated upon a transmission shaft (1) and connected with the transmission shaft (1).

42. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein upon a hub (3), one cylinder (5) is situated in a cup-shaped aperture of which and forming a pressure space (6), a radially inner section of a piston (10) for the outer clutch (B) is axially movably passed.

43. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 42, wherein the cylinder (5) is formed in two parts, a radially inner wall thereof

10/565,450

being formed by an outer side of the hub (3) and a axially rear wall and radially outer wall by one part mounted on the hub (3) and secured by means of a guard ring (4).

44. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 42, wherein the cylinder (5) is sealed tight against a pressure medium relative to the hub (3).

45. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 44, wherein a sealant (67) is vulcanized on an inner side of the axially aligned section of the cylinder (5).

46. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 44, wherein the cylinder (5) is sealed relative to the hub (3) by a separate sealant.

47. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein the pressure compensation space (25) for a piston (10) is formed between a side axially pointing away from a pressure space (6) of a piston-cylinder arrangement for the radially outer clutch (B) and a radially inner section (54) of the common disc carrier (9).

48. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein in the pressure compensation space (25) for an actuating piston (10) for the outer clutch (B), a recoil element (26) is situated which directly or indirectly (34) supports itself axially by one of an end on the actuating piston (10) and by another end on a radially inner section (54) of the common disc carrier (9).

49. (CURRENTLY AMENDED) The clutch arrangement according to claim 39, wherein in the pressure compensation space (25) for a piston (10), one radially aligned baffle plate (34) is fastened on an axially radially inner section (54) of a common disc carrier (9) in a manner such that between the two parts, one coolant or lubricant guide space (59) is formed for the coolant or lubricant flow (3) for the outer clutch (B). ←

50. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a baffle plate (34) has on a radially inner section, one inlet aperture (51) through which the coolant or lubricant can enter from the pressure compensation space (25) for the outer clutch (B) into a coolant or lubricant guide space (59).

10/565,450

51. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein in an area of a radially outer section of a baffle plate (34) in a common disc carrier (9), one radially outlet aperture (48) is formed through which the coolant or lubricant can exit from a coolant or lubricant guide space (59).

52. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a flow duct (62) for the coolant or lubricant flow (30) is formed radially above an outlet aperture (48) in a common disc carrier (9) between the disc carrier (9) and a radially outer section of an actuating piston (17) for the radially inner clutch (E).

53. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein in a paraxially aligned section (63) of a common disc carrier (9), radially aligned apertures (piercing 14) are formed through which the coolant or lubricant flow (30) can reach discs (21, 22) of the outer clutch (B).

54. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein in diameter area beneath a disc set for the radially inner clutch (E), two actuating pistons (10, 17) are situated axially directly to right and left sides next to the common disc carrier (9).

55. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein on an radially inner section a baffle plate (34) is pressed by a recoil element (26) situated in the pressure compensation space (25) axially against a radially inner section (54) of the common disc carrier (9).

56. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a baffle plate (34) is clamped on a radially outer section upon an inner side of a horizontally aligned section (47) of a common disc carrier (9).

57. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a baffle plate (34) carries on an inner side of a radially outer section a sealant (49) which seals the pressure compensation space (25) against an actuating piston (10) for actuating the outer clutch (B).

58. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein the pressure space (8) of the piston-cylinder arrangement for actuation of the radially inner clutch (E) is essentially formed by a wall of the inner section (54) of a common disc carrier (9) that points away from the pressure

10/565,450

compensation space (25) for a piston (10) of the outer clutch (B) and one section of a hub (3).

59. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein for the inner clutch (E), one pressure compensation space (31) is formed which is delimited by a hub (3), a baffle plate (19), the same as by a side of the actuating piston (17) pointing away from a common disc carrier (9).

60. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein in a pressure compensation space (31) for the actuating piston (17) of the inner clutch (E), one recoil element (18) is situated and supported axially by one end on a baffle plate (19) and by another end on the actuating piston (17).

61. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein via a sealant (45), a baffle plate (19) seals the pressure compensation space (31) against a left-side "t" leg (42) of a piston (17) pointing away from a common disc carrier (9).

62. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein the piston (17) for actuation of the inner clutch (E) is axially passed by a right-side "t" leg (43) to a paraxial section (47) of a common disc carrier (9).

63. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein the baffle plate (19) and the cylinder (5) are axially secured on the hub (3) by means of snap rings (4, 36).

64. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a hub (3) is situated upon an axial continuation (52) of a transmission housing (2), is rotatably supported on a continuation (52) and axially supported via an axial bearing (53) against the continuation (52).

65. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a transmission shaft (1) is designed as input shaft.

66. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein upon a side of the baffle plate (19) remote from the pressure compensation space (31) for the actuating piston (17) of the inner clutch (E), an inner disc carrier (37) of the inner clutch (E) is situated and connected with a transmission shaft (39).

10/565,450

67. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein between an inner disc carrier (37) and a baffle plate (19) of the pressure compensation space (31) for the actuating piston (17) of the inner clutch (E), a flow route (64) is formed for receiving the lubricant and coolant flow (20) for the inner clutch (E).

68. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein an outer disc carrier (38) of the radially outer clutch (B) is situated upon a side remote from a flow route (64) of an inner disc carrier (37) of the inner clutch (E).

69. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein an outer disc carrier (38) of the radially outer clutch (B) is situated upon a transmission shaft (40) which by way of an axial bearing (56) is secured against a transmission shaft (39) on which an inner disc carrier (37) of the inner clutch (E) is fastened.

70. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a transmission shaft (39) carrying an inner disc carrier (37) of the inner clutch (E) is supported by means of an axial bearing (55) against a transmission shaft (1) carrying a hub (3) and against the hub (3).

71. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein an actuating piston (10) of the outer clutch (B) has on a radially outermost end a paraxial section (65) which is designed as a rotational speed indicator for a rotational speed sensor (12).

72. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a radial arrangement of an aperture (51) in a baffle plate (34) defines a maximum fluid level (7) which the lubricant or coolant reaches in the pressure compensation space (25) for the actuating piston (10) of the outer clutch (B).

73. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a supply of the pressure compensation space (25) for a piston (10) of the outer clutch (B) and the supply thereof with coolant and lubricant are effected via a hole (57) in a hub (3) which communicates by flow technique with a hole (29) in the continuation (52) of the transmission housing (2).

10/565,450

74. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a pressure space (6) for the piston-cylinder arrangement (3, 5, 10) for actuation of the outer clutch (B) is supplied with an actuating pressure via a hole (58) in a hub (3) which for its part is connected by flow technique with a hole or peripheral groove (27) in a continuation (52) of a transmission housing (2).

75. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein a pressure space (8) of the actuating cylinder for the radially inner clutch (E) is filled via hole (66) in a hub (3) which is in flow connection with a separate hole or annular groove (28) in a continuation (52) of a transmission housing (2).

76. (PREVIOUSLY PRESENTED) The clutch arrangement according to claim 39, wherein the pressure compensation space (31) can be supplied with the lubricant or coolant via a hole (61) in a hub (3).